

AAAAI Ask The Expert

8/16/11

Without sounding too parochial, I would refer you to two relatively recent short reviews which you might find helpful:

Weber RW. Cross-reactivity of pollen allergens: impact on allergen immunotherapy. *Ann Allergy Asthma Immunol* 2007;99:203-12.

Weber RW. Guidelines for using pollen cross-reactivity in formulating allergen immunotherapy. *J Allergy Clin Immunol* 2008;122:219-21.

In a nutshell:

The four major ragweeds, short (*Ambrosia artemisiifolia*), giant (*A. trifida*), western (*A. psilotachya*), and false (*A. acanthicarpa*), all fairly strongly cross-react. Slender (*A. tenuifolia*) and southern (*A. bidentata*) are less potent. Cocklebur (*Xanthium communis*) and burweed marshelder (*Iva xanthifolia*), although in the same tribe, do not cross-react sufficiently, and if you think they're important in your area, need to be evaluated separately.

Sages (*Artemisia* spp) strongly cross-react. Cross-reactivity with ragweed is present to only a minor degree. Dog fennel (*Anthemis cotula*), which is in the same tribe, has no cross-reactivity data published.

Members of the old *Chenopodiaceae* family (now in *Amaranthaceae*) are sufficiently different to be tested and treated separately, such as Russian thistle (*Salsola pestifer*=*Salsola kali*) and burning bush (*Kochia scoparia*). However, lamb's quarter (*Chenopodium album*) has strong cross-reactivity with other members. Also, saltbushes (*Atriplex* spp) strongly cross-react amongst themselves.

Dick Weber, M.D.